

Strategies for 5% and 1% - Answers

1. To find 5% of a number, divide it by 5.

This does not work! Try it in the calculator to see that dividing a number by 5 gives a much bigger answer than 5% of that number. Can you figure out what percent of a number you do get by dividing by 5?

2. To find 5% of a number, divide it by 10 and then divide it by 2.

This works! Dividing a number by 10 gives you 10% of the number. Dividing 10% by 2 gives you 5% of the number.

3. To find 5% of a number, divide it by 2 and then divide it by 10.

This works! Dividing a number by 2 gives you 50% of the number. Dividing 50% by 10 gives you 5% of the number. Why do you think dividing by 10 and then dividing by 2 gives the same result as dividing by 2 and then dividing by 10? (Drawing pictures may help you think about this.)

4. To find 5% of a number, find 10% of the number and then find half of that.

This works! Half of 10% is 5%. On the grid model with 100 boxes, 5% is 5 boxes and 10% is 10 boxes. 5% is half as many boxes as 10%.

5. To find 5% of a number, multiply it by 0.5.

This does not work! Try using a calculator to multiply a number by 0.5. You will get something much bigger than 5%. Can you figure out what percent of the number you do get?

6. To find 5% of a number, multiply it by 0.05.

This works! 0.05 means 5-hundredths. Multiplying a number by 5-hundredths gives you 5-hundredths or 5% of the number.

7. To find 1% of a number, divide it by 1.

This does not work! What happens when you divide a number by 1?

8. To find 1% of a number, divide it by 100.

This works! 1% of a number means 1-hundredth of the number, so you can find it by dividing by 100.

9. To find 1% of a number, divide it by 10 and then divide it by 10 again.

This works! Dividing a number by 10 gives you 10% and dividing that by 10 gives you 1%.

10. To find 1% of a number, find 10% and then divide that by 10.

This works! 1% is one-tenth of 10%.

11. To find 1% of a number, multiply it by 0.1.

This does not work! Try multiplying a number by 0.1. What percent of the number do you get?

12. To find 1% of a number, multiply it by 0.01

This works! 0.01 means 1-hundredth. Multiplying a number by 1-hundredth gives you 1-hundredth or 1% of the number.